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Tianyi Ren* (tyren@math.jhu.edu), Krieger Hall, 3400 N. Charles Street, Baltimore, MD 21218,
and **Yakun Xi** and **Cheng Zhang**. *An Endpoint Version of Uniform Sobolev Inequalities*.

We prove an endpoint version of the uniform Sobolev inequalities in a classical paper of Kenig, Ruiz and Sogge. Although strong inequality no longer holds for the pairs of exponents that are endpoints in the classical theorem of Kenig, Ruiz and Sogge, they enjoy restricted weak type inequality. The key ingredient in our proof is an interpolation technique first introduced by Bourgain. We also prove restricted weak type Stein-Tomas restriction inequalities on some parts of the boundary of a pentagon in which strong Stein-Tomas inequalities hold. This completely solves the exponents for which Stein-Tomas inequalities hold, and will be essential in our proof of the endpoint uniform Sobolev inequalities when first order terms enter. (Received July 28, 2017)